0044

From: <Jeff_McKenzie@blm.gov>
To: <dharber@fs.fed.us>, <Gregg_Hudson@blm.gov>, <leroymead@utah.gov>, <rplayer@fs.fed.us>, <susanwhite@utah.gov>, <Sue_Burger@blm.gov>, <SWRigby@blm.gov>, <JERRIANNERNSTSEN@utah.gov>, <chriscolt@utah.gov>, <Stan_Perkes@ut.blm.gov>, <James_Kohler@blm.gov>, <Betsy_Herrmann@fws.gov>, <Larry_Crist@fws.gov>, <Laura_Romin@fws.gov>, <David_Waller@blm.gov>, <pamgrubaughlittig@utah.gov>, <Diana_Whittington@fws.gov>
Date: 10/13/2005 3:30:39 PM
Subject: Re: Fw: amended charter and draft minutes

Jim Kohler's ppt presentation...

Jeff McKenzie/UTSO/UT/BLM/DOI
10/13/2005 11:19 AM

To: James Kohler/UTSO/UT/BLM/DOI
cc:
Subject: Re: Fw: amended charter and draft minutes(Document link: Jeff McKenzie)

Thanks.

James Kohler/UTSO/UT/BLM/DOI
10/13/2005 09:02 AM

To: Jeff McKenzie/UTSO/UT/BLM/DOI@BLM
cc:
Subject: Re: Fw: amended charter and draft minutes(Document link: Jeff McKenzie)

Here it is in .pdf format to share with your team members. Let me know if you need anything else.

(See attached file: SLCC Reserves.pdf)
James F. Kohler
Utah State Office
Chief, Branch of Solid Minerals
(801) 539-4037

Jeff McKenzie/UTSO/UT/BLM/DOI
10/12/2005 02:32 PM

To: James_Kohler@ut.blm.gov@BLM
cc:
Subject: Fw: amended charter and draft minutes

They asked if you would share your PPT presentation, from the UMA meetings, on coal resources in Utah...

----- Forwarded by Jeff McKenzie/UTSO/UT/BLM/DOI on 10/12/2005 02:30 PM -----

Diana_Whittington@fws.gov
10/12/2005 09:55 AM

To: dharber@fs.fed.us, Gregg_Hudson@blm.gov, Jeff_McKenzie@blm.gov, leroymead@utah.gov, rplayer@fs.fed.us, susanwhite@utah.gov, Sue_Burger@blm.gov, SWRigby@blm.gov,

david_waller@blm.gov,
joehelfrich@utah.gov,
JERRIANNERNSTSEN@utah.gov
cc
James_Kohler@blm.gov,
nathansill@utah.gov,
tonywright@utah.gov
Subject
amended charter and draft minutes

Sorry this has taken so long. Could ya'll please take a look at the amended charter and draft minutes to see if everything we discussed yesterday has been captured? I'd like to send the 'finals' to Pam early this afternoon.

(See attached file: wildlifebuffer_charter_Oct12.doc)(See attached file: Minutes from October 11.doc)

Thanks!

Diana M. Whittington
USFWS, Ecological Services
Energy and Migratory Bird Lead
2369 West Orton Circle
West Valley City, UT 84119
ph: 801/975-3330 x 128
fx: 801/975-3331

"After due consideration, everyone needs data, no exceptions."(See attached file: wildlifebuffer_charter_Oct12.doc)(See attached file: Minutes from October 11.doc)

Utah Coal and Other Energy Sources

Presented To

Salt Lake Chamber of Commerce

July 27, 2005

Energy Resources Presentation Objectives

- Discuss importance of Utah coal reserves
- Analyze Utah coal production trends
- Review current reserves and discuss outlook for the future
- Provide overview of Utah's oil shale and tar sand resources

Resources vs. Reserves

- Resources
  - Naturally occurring concentrations or deposits of coal in the earth's crust, in such forms and amounts that economic extraction is currently or potentially feasible
- Reserves
  - Parts of a coal reserve base which could be economically extracted or produced at the time of determination considering environmental, legal, and technologic constraints

Coal Reserves – Technical Constraints

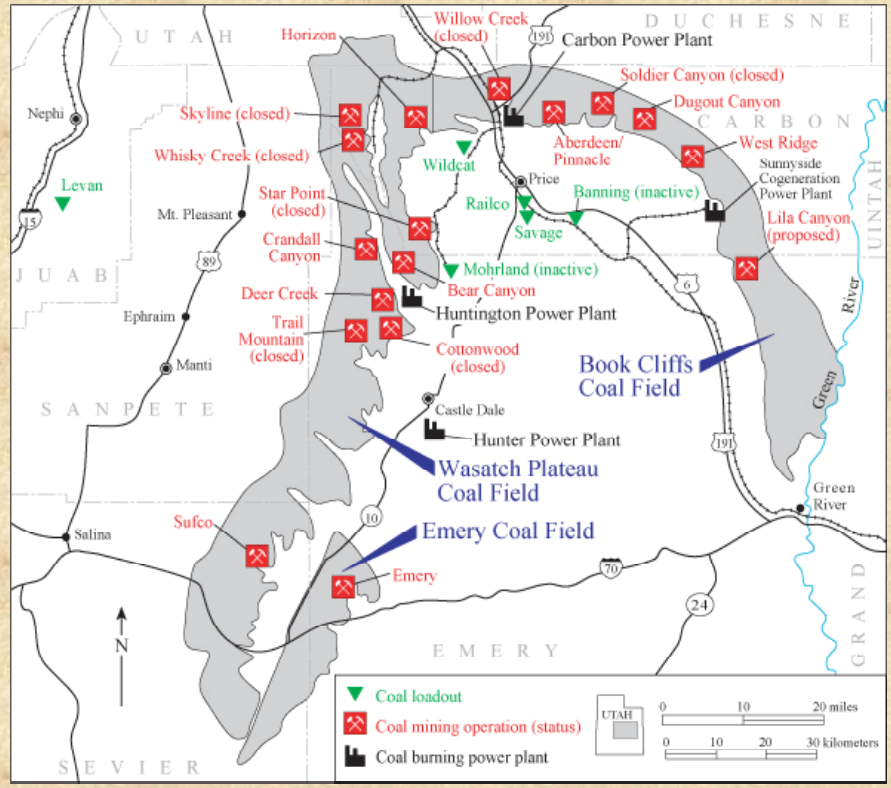
- Access
- Profitability
  - Sufficient reserves for investment
  - Market for product
- Coal bed characteristics
  - Thickness
  - Quality
  - Depth of cover
  - Geologic conditions
- Size of reserve block

Coal Reserves – Legal Constraints

- Must be available for development
  - Federal unsuitability criteria
  - Federal land-use plan restrictions
  - Local zoning requirements

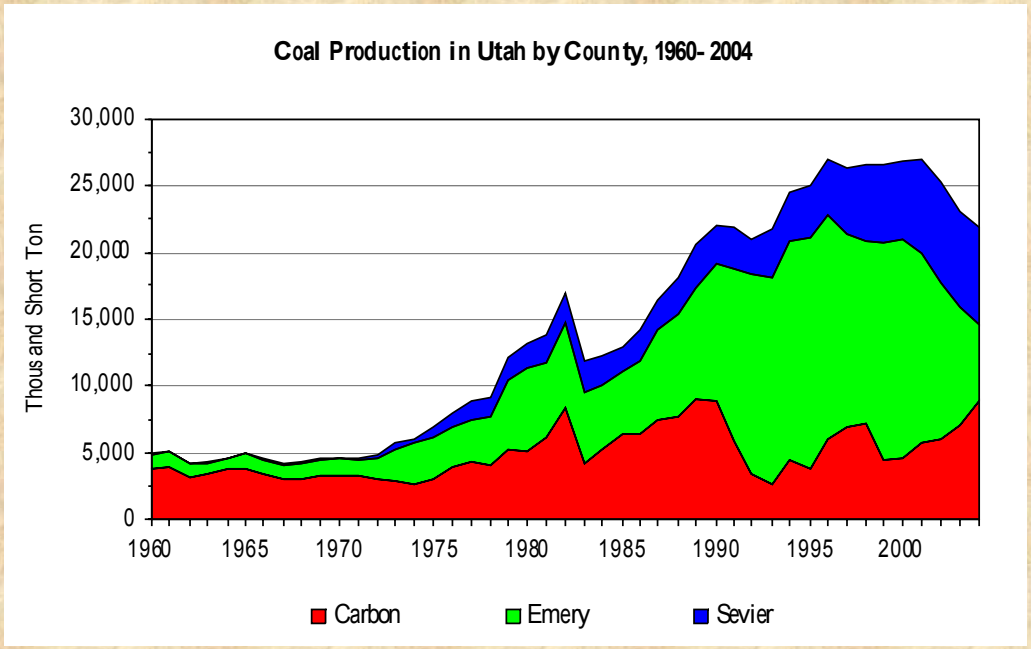
Coal Reserves – Environmental Constraints

- Hydrologic protection
  - Perennial streams
  - Springs and seeps
  - Stock ponds
- Escarpment protection
- Wildlife protection
  - T&E species
  - Seasonal restrictions
- Safety

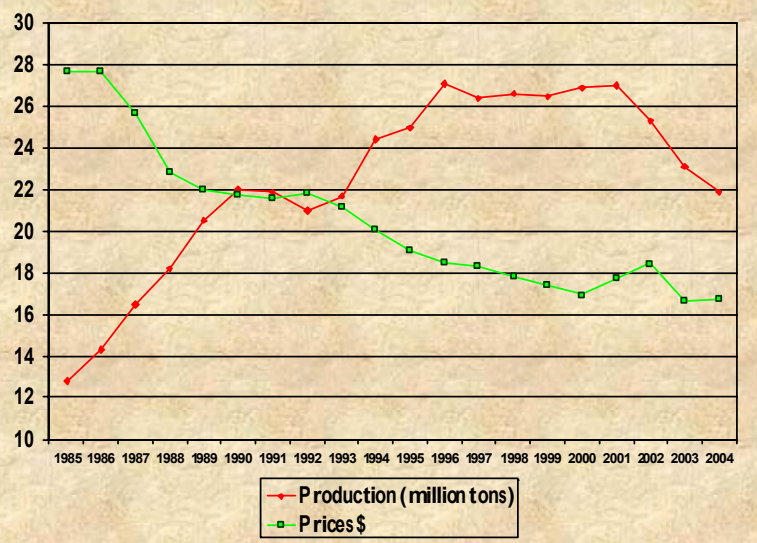

UTAH
DUCHESNE
CARBON
UINTAH
SANPETE
SEVIER
EMERY
JUAB
Nephi
Levan
Mt. Pleasant
Ephraim
Manti
Salina
Horizon
Willow Creek (closed)
Carbon Power Plant
Soldier Canyon (closed)
Dugout Canyon
Skyline (closed)
Whisky Creek (closed)
Star Point (closed)
Crandall Canyon
Deer Creek
Trail Mountain (closed)
Wildcat
Aberdeen/ Pinnacle
West Ridge
Price
Railco
Savage
Banning (inactive)
Sunnyside Cogeneration Power Plant
Lila Canyon (proposed)
Mohrland (inactive)
Bear Canyon
Huntington Power Plant
Cottonwood (closed)
Book Cliffs Coal Field
Castle Dale
Hunter Power Plant
Wasatch Plateau Coal Field
Emery Coal Field
Sufco
Emery
Green River
Green River
N
Coal loadout
Coal mining operation (status)
Coal burning power plant
UTAH
0 10 20 miles
0 10 20 30 kilometers

Importance of Utah Coal

- Used to produce 80% of electricity generated in Utah
- In 2003 coal sales generated total revenue of almost $384 million
- In 2000, coal operations provided employment for 1645 miners

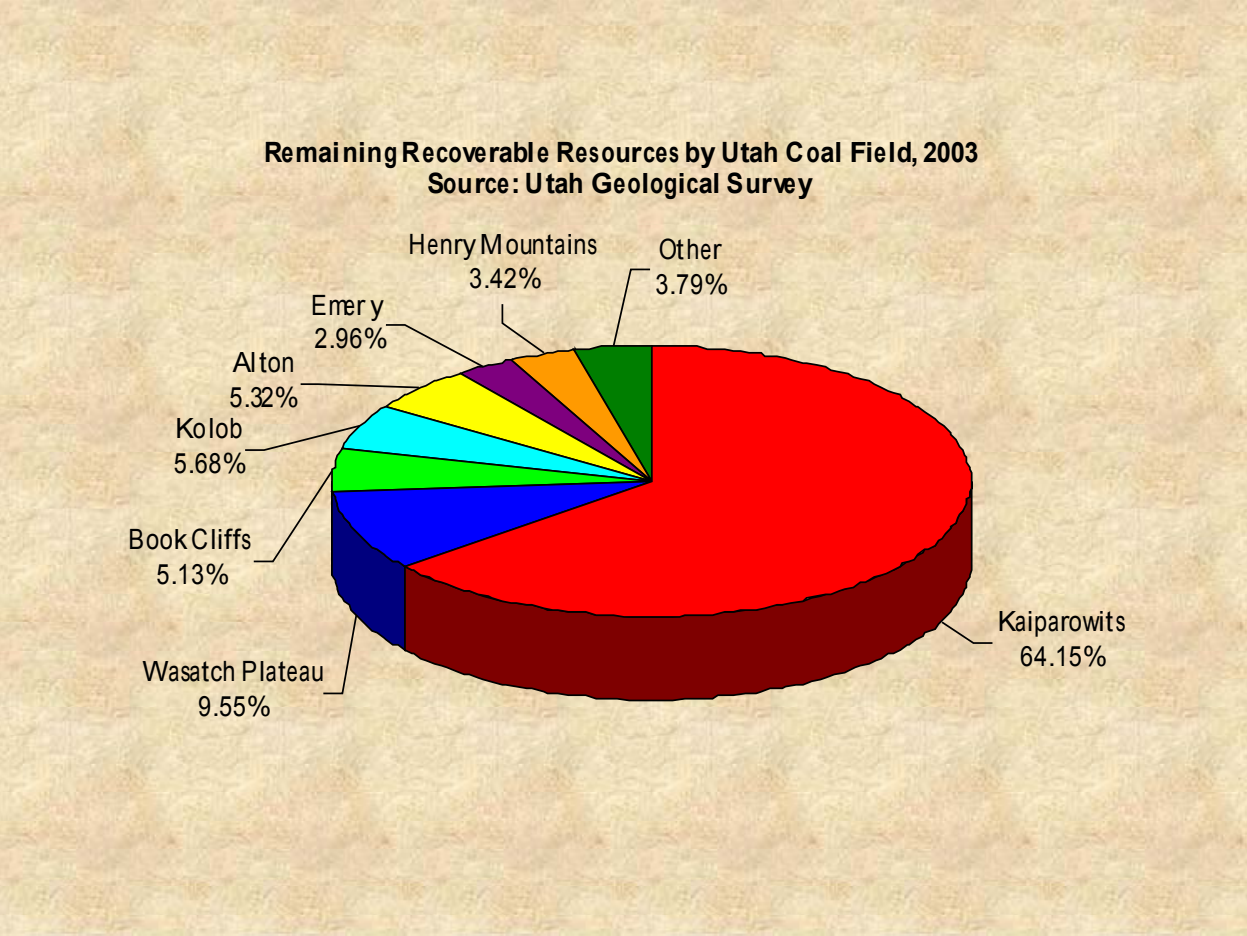

Coal Production in Utah by County, 1960- 2004
Thousand Short Ton
30,000
25,000
20,000
15,000
10,000
5,000
0
1960
1965
1970
1975
1980
1985
1990
1995
2000
Carbon
Emery
Sevier

Utah Coal Prices vs. Production



Utah Coal Production Trends

- Production increased 1983 to 2001
- Peak production of 27 million tons in 2001
- Cumulative production of 367 million tons 1990 to 2004
- Over same period, leases were issued containing a little over 300 million tons


Remaining Recoverable Resources by Utah Coal Field, 2003
Source: Utah Geological Survey
Henry Mountains
3.42%
Other
3.79%
Emery
2.96%
Alton
5.32%
Kolob
5.68%
Book Cliffs
5.13%
Wasatch Plateau
9.55%
Kaiparowits
64.15%

Central Utah Coal
Reserves Reported by Companies

Company	**Reported Reserves**
Canyon Fuel Co., LLC	149,000,000
Consolidation Coal Co.	33,800,000
Pacificorp	67,600,000
Other (ANR, Andalex, Lila, Horizon)	130,000,000
Total	380,400,000

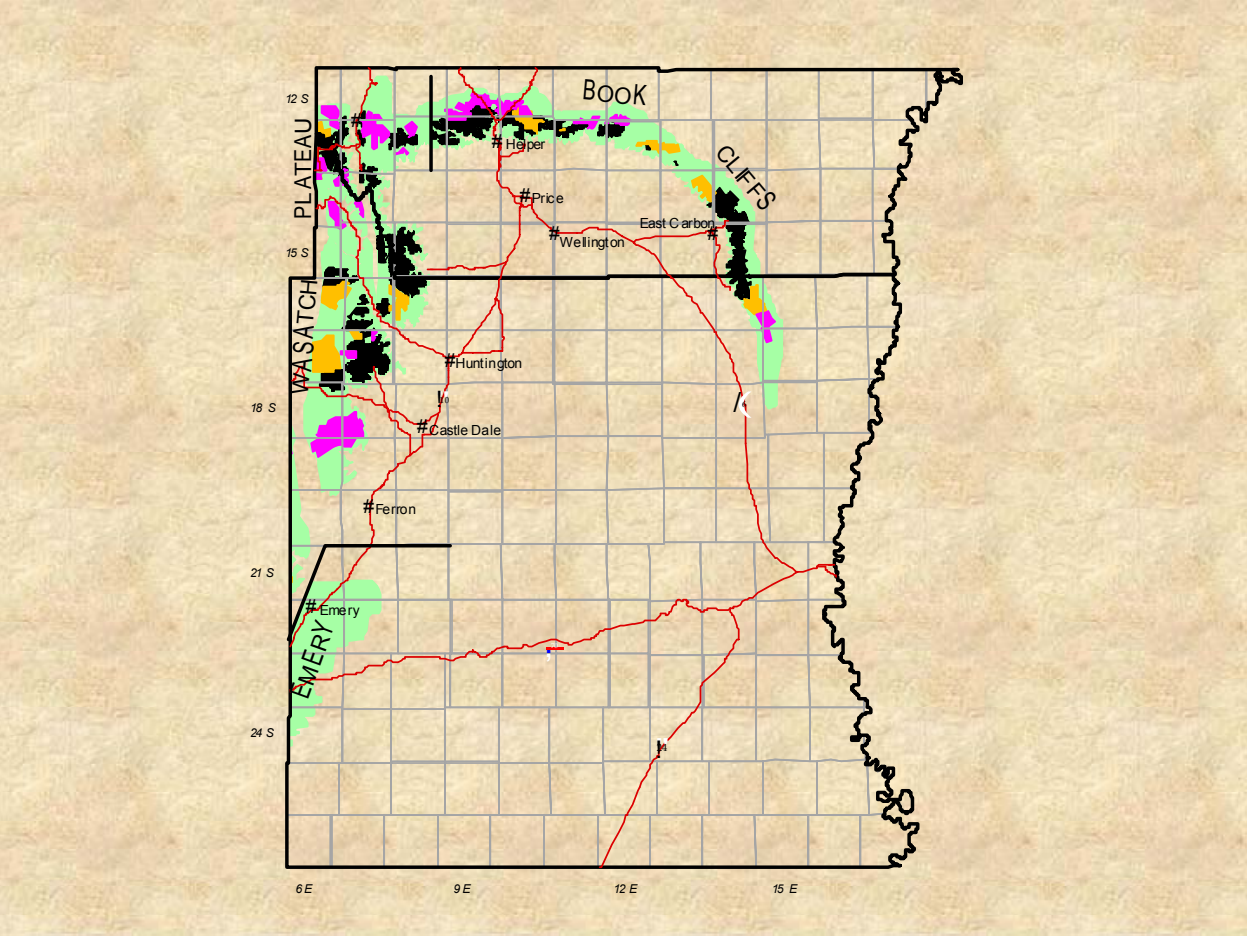
Coal Reserve Base Carbon and Emery Counties, Utah

(Source: BLM Price RMP)

Coal Field	**Reserve Base** (10^6 tons) **2003-2017**	**Reserve Base** (10^6 tons) **2018-2032**	**Total Reserve Base** (10^6 tons)
Wasatch Plateau	118.5	156.7	275.2
Book Cliffs	217.4	468.6	686.0
Emery			238.7
Total			1,199.9

Reserve Estimate Comparison

- Utah Energy Statistical Abstract
  - Book Cliffs, Wasatch Plateau, and Emery Coal Fields have remaining "reserves" of 2.6 Billion tons
  - 100+ years of mining @ 25 million tons/year
- Reserves Reported by Companies
  - Book Cliffs, Wasatch Plateau, and Emery Coal Fields have remaining reserves of < 0.4 billion tons
  - 16 years of mining @ 25 million tons/year
- Reserves estimated by BLM in land use plan
  - Reserve Base estimated at 1.2 billion tons
  - 48 years of mining @ 25 million tons/year

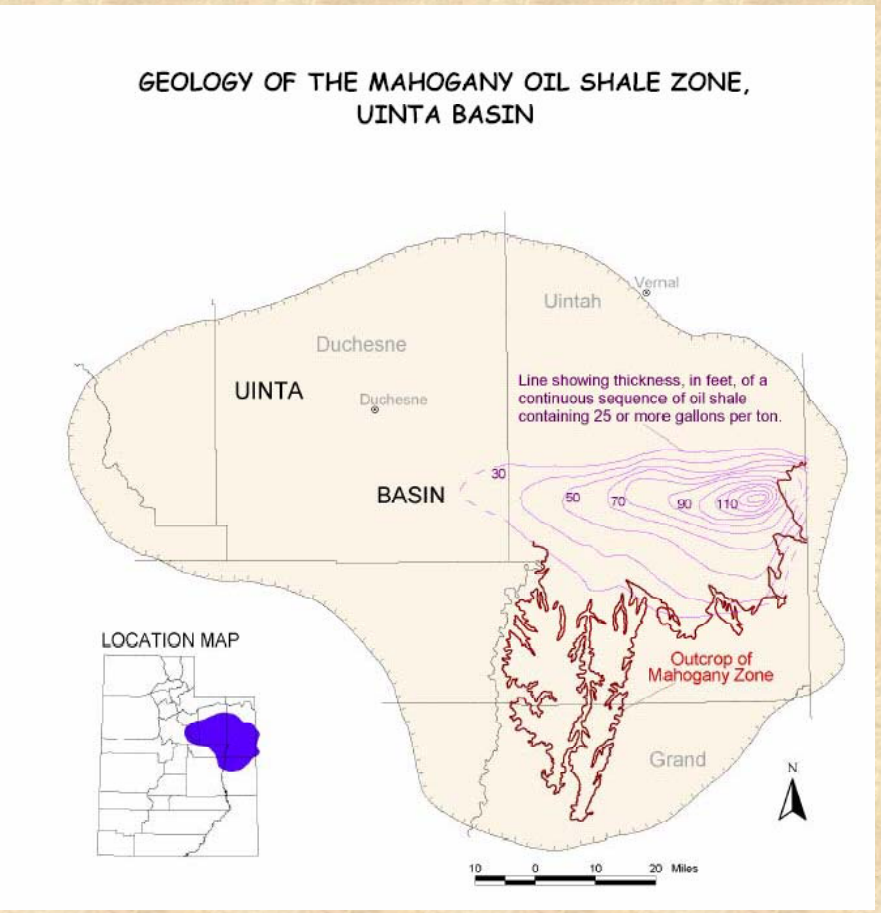

BOOK
CLIFFS
PLATEAU
WASATCH
EMERY
Helper
Price
East Carbon
Wellington
Huntington
Castle Dale
Ferron
Emery
12 S
15 S
18 S
21 S
24 S
6 E
9 E
12 E
15 E

Oil Shale

- Definition: fine-grained sedimentary rocks containing relatively large amounts of organic matter from which significant amounts of shale oil and combustible gas can be extracted by destructive distillation.
- Generally considered to be oil and gas "source material" or an immature oil and gas deposit

(a)

FIGURE 5.57. (a) Oil shale deposits in the United States. (b) The major oil shale deposits in the Green River formation of Wyoming


GEOLOGY OF THE MAHOGANY OIL SHALE ZONE,
UINTA BASIN
Vernal
Uintah
Duchesne
UINTA
Duchesne
BASIN
Line showing thickness, in feet, of a continuous sequence of oil shale containing 25 or more gallons per ton.
30
50
70
90
110
LOCATION MAP
Outcrop of Mahogany Zone
Grand
N
10 0 10 20 Miles

Oil Shale Resources

- U.S. Primary Resources in Green River Formation in Wyoming, Utah, and Colorado
- Green River Formation estimated to contain over 2 trillion barrels of oil
- Equivalent to 1 to 2 times total world oil reserves

Impediments to Oil Shale Development

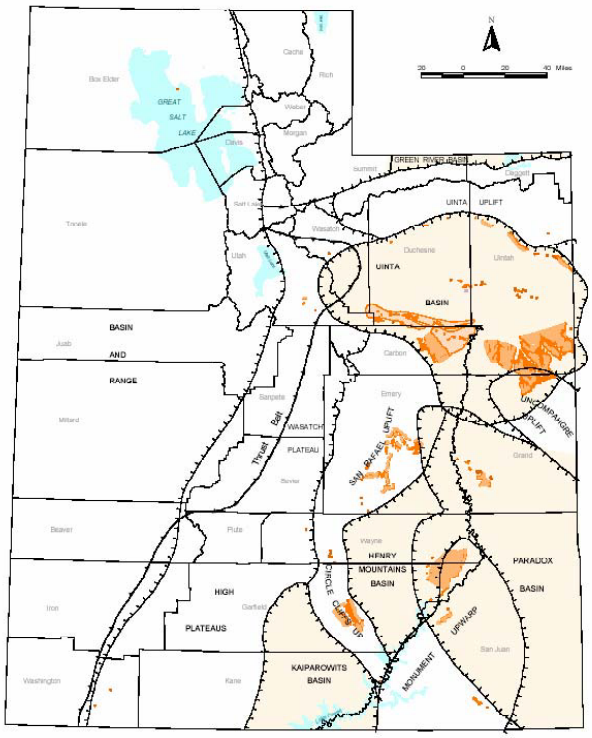
- Economic
  - Current Costs > $60 per barrel
- Environmental
  - Global Warming and Greenhouse emissions
  - Disposal of Spent Shale
  - Process requires water
- Regulatory
  - U.S. Presently has no regulations to lease oil shale

Tar Sands

- Definition: A type of oil sand or sandstone from which the lighter fractions of crude oil have escaped, leaving a residual asphalt to fill the interstices


Tertiary
Duchesne River
Cretaceous
Mesa Verde
angular
unconformity
tar sand

LOCATION OF UTAH'S TAR SAND DEPOSITS



Utah Tar Sand
Estimated In-Place Resources

Deposit	Measured (MMB)	Speculative (MMB)
Sunnyside	4,400	1,700
Tar Sand Triangle	2,500	420
PR Spring	2,140	2,230
Asphalt Ridge	820	310
Circle Cliffs	590	1,140
Other	1,410	1,530
Total	11,860	7,330

Impediments to Tar Sand Development

- Economics – cost to mine and produce more expensive than conventional oil production
- Some of same environmental concerns as Oil Shale
- Federal Deposits Leased with Oil and Gas as Combined Hydrocarbon Leases

October 12, 2005

Wildlife Buffer Areas - Subcommittee of Coal InteragencyGroup CHARTER (Ad hoc)

Introduction

The Wildlife Buffer Areas Subcommittee (Subcommittee) of the Coal Interagency was created in September of 2005 to promote uniform and consistent wildlife recommendations for decisions by the Utah Coal Regulatory Program (UCRP). This charter details the mission, structure, and operating procedures of the Wildlife Buffer Areas Subcommittee to allow it to function to increase efficiency and expedite quality permitting and compliance actions in a timely manner.

Team Mission

The Mission is to promote uniform and consistent wildlife recommendations for decisions by the Utah Coal Regulatory Program:

- To determine the "customers" / stakeholders in the work and findings of the Subcommittee, and to determine which of their processes, at which point, would benefit from wildlife guidance.

- To identify existing buffers and their sources

    - Resolve discrepancies between conflicting buffer recommendations
    - For those instances when discrepancies can not be resolved, develop guidance on which agency's protocol takes precedence under which circumstances.

- To develop and outline procedures for evaluating, predicting, and avoiding potential wildlife-coal operation and exploration conflicts

- To develop a timeline matrix and critical path that will identify 'crunch' points and deadlines to be incorporated into the wildlife review process.

Team Goals

- To develop a consensus document with the following components: critical path, matrix of coal schedules v wildlife-related schedules, recommended best practices, mitigation options, and a decision process.

- Endorsement of document and process by the Coal Managers, UDWR, and USFWS.

Team Membership

The Acore@ members of the process team are: Susan White (UDOGM), Leroy Mead

(UDWR); Dale Harber and Rod Player (USFS); Jeff McKenzie, Steve Rigby, Sue Burger, Gregg Hudson, and David Waller (BLM); and Diana Whittington (USFWS), Chair. Associated members include Jerriann Ernstsen and Joe Helfrich (UDOGM), Jim Kohler (BLM), Chris Colt and Nathan Sill (UDWR). Other staff members will be asked to participate as needed.

Team Structure

All members of the team have equal voice and are expected to participate in all team work unless otherwise excused.

Meetings will have a prepared agenda. The meeting agenda will be prepared by the chair of the meeting. The note taker will rotate.

Decision making will be by consensus.

Team Ground Rules

Relationship Among Members and Associated Members

1. Mutually respect and trust one another.
2. Be prepared for meetings.
3. Start and end meetings on time.
4. Don=t talk when another person is talking.
5. Avoid side discussions or conversations.
6. Reinforce one another positively.
7. Avoid prejudging anyone or any idea.
8. Discourage talking negatively about absent members.
9. No cheap shots.

Member and Associated Member Conduct

1. Participate actively.
2. Stay focused on the task at hand.
3. Be clear and don=t belabor a point.
4. Avoid dwelling on issues that cannot be resolved within the scope of Team meeting.

Team Procedures

1. The Team will meet once a month.
2. Team members will make a report of progress in each of the meetings.
3. The Team will identify and establish projects (tasks) to be undertaken for the UCRP.

Signatures

Signature of Associate Director of Mining _____

Signatures of Team Members:

_____ _____

_____ _____

_____ _____

c:\diana\coal\new folder\wildlifebuffer_charter.doc

Minutes from October 11, 2005 meeting of the Wildlife Buffer Areas Subcommittee

We revised the draft charter. Diana will send out for additional review.

Summary of Outcomes:

Important: We must have feedback from the operators as soon as possible. Is our concept going to meet their needs? We will provide them with a brief description of our ideas and request feedback.

Objective of subcommittee is to produce, by May 2006, a document tentatively entitled: Wildlife Buffers Toolkit

Second goal is endorsement of this consensus document by the Coal Managers, UDWR, and USFWS.

For the present the document will deal with underground coal mining and will contain:

- Background on existing buffers.
- Uniform buffers for all agencies, both spatial and seasonal, with language providing for special situations when conflicting buffers remain.
- Mitigation options.
- Time lines for coal operations and exploration, notification, processing, seasonal closures, survey requirements, etc. Information will be placed within a spatial context.
- Critical path for when decisions must be made, by whom, and which steps must take place before subsequent ones can occur.
- Process/procedural guidelines including agency contacts.

Additional concepts which were discussed but tabled until the document is completed:

Should/could the Core Team of the Subcommittee continue after completion and endorsement of the document in order to track the efficacy of the process and to serve as a wildlife problem-solving team?

Can we develop a web-based GIS Risk-Analysis tool enabling operators and agencies to review areas into which they will be moving for wildlife information, e.g. which species, seasonal information, will surveys be required and when?

Can we use this same format for resolving wildlife conflicts for oil and gas exploration and development?

Next meeting will be 14 Nov. from 1 to 4 at the Price BLM.

Tasks to complete **prior to the next meeting**:

The subcommittee is looking for a coal mining/wildlife guideline bookwritten by Larry Dalton and Heather Musclow.

All entities having information on wildlife buffers (spatial or seasonal) will provide the data (in GIS or Excel spreadsheet) to Sue Burger so it can be loaded on a computer for our use.

Susan White, UDOGM, will look for the overview of the coal program that was developed a couple of years ago and assign some rough timeframes to the process. She will provide the GIS data layer for the permitted areas (completed).

Jeff McKenzie will try to acquire and provide information on the leased areas.

Rod Player will ask someone to burn a CD with FS vegetation data layers for Diana, who will clip the vegetation layer by the permitted and leased boundaries.

UDWR will communicate with Sue Burger about how to access and download data on DWR website.

UDWR will see if they can come up with a simple model for raptor habitat in order to create a GIS layer to inform operators and agencies regarding the probability of cliff nesting raptors, riparian nesting raptors, or other raptors for which surveys might be required. Since UDWR cannot release point data except when a specific project is likely to impact a nest, the goal is to create a layer analogous to the winter-range layers to flag an area for the possible need for raptor mitigation.

Find out if anyone will need to conference in via telephone.